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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,703	09/19/2003	Charles Abraham	GLBL-015PID1	6015

7590 02/23/2005

MOSER, PATTERSON & SHERIDAN LLP
Suite100
595 Shrewsbury Avenue
Shrewsbury, NJ 07702

EXAMINER

KIM, KEVIN

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/665,703

Applicant(s)

ABRAHAM ET AL.

Examiner

Kevin Y Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-17 is/are allowed.
- 6) ☒ Claim(s) 1,3 and 6 is/are rejected.
- 7) ☒ Claim(s) 2,4,5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/8/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1,3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woo (US 5,808,582) in view of Yester, Jr. et al (US 4,811,362).

Claim 1.

Woo discloses a satellite signal receiver (GPS receiver, see Fig. 12), comprising:

- 1) "a front end" (1202) for receiving a satellite signal
- 2) "a sampling circuit" (1203) for digitizing the satellite signal
- 3) "a processor" (1204) for performing at least a subset of a convolution between a pseudorandom reference code and the digitized signal. See Abstract.

Woo fails to teach the sampling circuit (1203) to have “either a first sampling spacing or a second sampling spacing” and “a mode selection processor for selecting either said first sampling spacing or said second sampling spacing.” Yester, Jr. et al teaches a low power digital receiver having a sampling circuit (30,31) that has a plurality of sampling spacing, see col.5, lines 25-41, and “a mode selection processor” (42) for selecting one of the plurality of sampling spacings, see col. 6, lines 52-66, for the purpose of selecting the lowest acceptable sampling rate to dynamically adapt to changing conditions. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the “sampling circuit” (1203) of Woo to have two or more sampling spacings, selectable by “a mode selector” (42), for the purpose of selecting a lowest sampling rate that minimizes the power consumption. See col. 5, lines 15-18.

Claim 3.

Woo disclose a GPS receiver, thereby including “a computer” (1205) for computing a position location.

Claim 6.

Woo discloses “a plurality of processing channels” (1204), where each channel produces at least a subset of a convolution for a different satellite signal. See that a plurality of a digital correlators and demodulators are provided, one per GPS satellite, thus each produces at least a subset of a convolution for a different satellite signal.

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Allowable Subject Matter

4. Claims 2,4,5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 7-17 are allowed.

Information Disclosure Statement

6. The information disclosure statement filed on September 19, 2003 does not fully comply with the requirements of 37 CFR 1.98 because the application number is that of the parent application. Since the submission appears to be *bona fide*, applicant is given **ONE (1) MONTH** from the date of this notice to supply the above mentioned omissions or corrections in the information disclosure statement. **NO EXTENSION OF THIS TIME LIMIT MAY BE GRANTED UNDER EITHER 37 CFR 1.136(a) OR (b).** Failure to timely comply with this notice will result in the above mentioned information disclosure statement being placed in the application file with the noncomplying information **not** being considered. See 37 CFR 1.97(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y Kim whose telephone number is 571-272-3039. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Law Firm

Patent Application
No. 10/665,703
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